

ELEVATOR OPERATION AND MAINTENANCE

June · July
1936

Third Party

Yep, the little rascal GRAIN has his third party today—and the candles are lighted upon a wee birthday cake to celebrate the occasion!

Garbed in his best dress, he coos and gurgles for the sheer joy of living and pride in the fact of his tremendous age!

'Course, he's still a bit of a little feller and kind of wobbly on his pins but that just makes him grin broader than ever, for he knows there is that much more room to grow!

And is he confident! "Why shouldn't I be?" he figures. "I'm a part of the grain industry and you can't keep us down!"

THERE'S SAFETY IN NUMBERS

by "SUPERINTENDENT SAYNE"

THERE'S not a man within the smell of grain dust today who doesn't remember that old quotation: "There's safety in numbers." But, what a lot of them don't stop to think about is that any proverb, to be enduring, must be applicable to any given situation—ancient or modern.

Well, in the old days, when any man's security was only guaranteed by the size of the army he had around him, that saying fitted in to perfection. Everybody was saying it, and it got to be a universal truism.

But times changed, and methods changed, and men were no longer dependent on a whopping bodyguard to assure their own safety. And with the shedding of the old customs, a host of old familiar sayings laid down and died. So how come this "Safety in numbers" business survived?

Simply because it was one of those aforementioned saws that met the competition of

continual change. It fell in neatly with the current conditions in every age since it was born. And now today it still remains something all of us readily recall because it's still hitting the ball by expressing a current condition.

"There's safety in numbers" . . . let's see what it means today.

At the beginning of the modern mechanical era in the nineteenth century the well-known disregard of workers' lives and health is a notorious fact. The number of safety appliances utilized for their protection totalled zero. Then, with increased knowledge — mechanical, practical and financial — the number of these measures increased. And today, the modern industry stirs itself in a big way to make the number of safety appliances and measures ONE HUNDRED PER CENT!

"There's safety in numbers?" You bet!

Editorial

by DEAN M. CLARK

WHOSE BUSINESS IS IT?

Published Monthly

332 So. La Salle St. CHICAGO, ILL. Phone HARrison 2425

A forum for operative and mechanical problems in terminal elevators.

\$1 PER YEAR

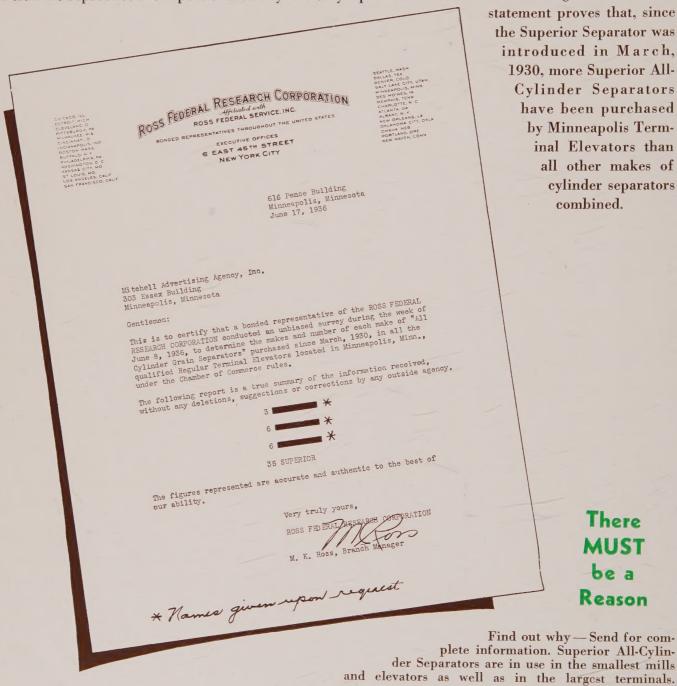


DEAN M. CLARK - - Publisher SANDY KEIR - - - - Editor JOHN SCHULTHEIS - Staff Artist CHARLES STREHL - Circulation HOSE business is it that the federal government has done nothing to counteract the mandatory "breadless" days of twenty years ago—a habit that has unfortunately stuck to the detriment of all; whose business is it that only a few bakeries offer a palatable loaf unadulterated with unnecessary substitutes and perhaps even detrimental ingredients—according to the European laws; whose business is it that the United States is probably first in wheat production and seventeenth in wheat consumption; and how much better everyone would fare if the above conditions were otherwise?

The political farmers' organizations are not going to take up the cudgel, the millers' associations would obviously be undiplomatic to suggest that their customers prepare better wares, and the grain handling industry is busy protecting the markets for the farmers—but someone can and must do the task, which really isn't so difficult, and when it is accomplished everyone will like it better, the farmer, the railroads, the grainmen, the millers, the bakers, and millions of wheat consumers with a greater potential. Let's get started!

Unbiased PROOF of Superior Domination

Below we reproduce the report of a survey made by a prominent national research organization. Their



SUPERIOR SEPARATOR CO., 483 North Cleveland Ave., St. Paul, Minn.

Loyalty

by M. FRANK BEYER

Resident Manager and Superintendent, Grand Trunk Pacific Elevator, Fort William, Ont.



PUNGENT, WEIGHTY, IMPRESSIVE, TIMELY THOUGHTS PRESENTED BEFORE THE CONVENTION OF THE SOCIETY OF GRAIN ELEVATOR SUPERINTENDENTS, IN DULUTH.

N DEALING with employees and the subject of loyalty we must not forget that the human race descends from the same stock, is partaker of the same nature and shares in the same hope, and although distinctions among men are necessary to preserve subordination and to reward merit and ability, yet no eminence of station in life should make us forgetful that we are human beings and that he who may be placed on the lowest spoke of fortune's wheel is justly entitled to our regards.

There is no substitute for work in bringing any venture to success. A man's deeds are not accomplished by needless bluster.

No Power in Noise

The biggest noise does not always come from the biggest engine. In the early days of railroading the engines were small affairs and the whistles were very large. One day a long drawn out whistle of a locomotive sounded from around the curve some little distance from the station, but the train did not appear as usual. A loafer on the station platform decided to investigate, and proceeded to walk down the track and around the curve. After a while he returned and explained to the group waiting at the station that the engineer had pulled the whistle cord a little too long, which caused the steam to go down, but as soon as the engine had been fired up again the train would pull in. So real power does not always consist of noise. It is not noise or fussing around that gets results, but steady, persistant and patient work.

You are working day after day in a big shop. You're getting a certain amount of money for your work. You're either satisfied and happy or else you are sore about something. If you're satisfied and know you're getting along all right—fine. If you're sore, I want to ask you one question:

"Do You Know WHO Is Your Boss?"

"Sure Mike," you say. "I'm working for the man who owns this business. He's my boss." But that's not so, not on your life! You're working for yourself — you bet you are! Sounds funny doesn't it?

It's a fact, just as sure as you are a day old; you're in business for yourself just as much as the big boy who owns the business! The big boy isn't your boss at all. He's *your customer*, and you are selling something to him, just as he is selling something to the people.

The only difference is that he's got a lot of money tied up in the business which he takes a chance on losing. You've got your money in a savings bank where it is safe, (that is, if you have been able to save any).

Now the "Boss," he's selling goods to his customer, the people, because the people need them. And you're selling your work to your customer, the "Boss," because he needs it.

Now supposing the boss starts to sell poor goods—he doesn't give the people full value for their money. What happens? The people find it out and won't buy his goods. They buy another's goods and he loses a customer.

Now, supposing you start to sell your customer, the Boss, poor work; you don't give a full day's work for a full day's pay. What then? Why, the boss is going to do the same thing with your poor work that the people do with his poor goods. He is going to buy someone else's work. So you lose your customer and have to look for somebody else to sell your work to.

The people have the right to buy the best goods they can get for their money. The "Boss" has the right to buy the best work he can get for his money.



So Much Money Buys Only

- SO MUCH GRAIN or
- SO MUCH ELEVATOR

The Rules Are Just The Same

The Bargain-Counter Buyer
Gets NO MORE Than He Pays For

An Elevator Can Be
A Definite Asset or
A Distinct Liability

• "STEWART-BUILT" PLANTS

ARE "MONEY-MAKERS"

FOR THEIR OWNERS

Deal with

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

IDENTIFIED WITH PROGRESSIVE ENGINEERING FOR 90 YEARS
343 SO. DEARBORN STREET CHICAGO. ILL.

H. G. ONSTAD Vice Pres.-Gen'l Mgr. You've got to look at it this way before you can get ahead. You've got to deliver the goods to get the money, no matter what you do. You'd have to do this if you had a little store on the corner. You'd have to do this if you were selling on the road.

Your merchant's delivery boy must deliver the goods if you are to get what you ordered and need. If he fails to deliver the goods there is trouble and sometimes the merchant loses a customer.

This simple illustration applies to every avenue of business life.

Do Your Own Delivering

A person is selected or appointed to an important position or assigned to a job. He is expected to deliver the goods. He is depended upon to do the work for which he was selected. With very few exceptions, he knows whether he is making good; he knows whether he is measuring up as he should. There are some exceptions, of course, principally on the part of those who do not think and others who do not care.

I once heard of a middle-aged man whose hair was jet black, and his whiskers (they wore them long and full in those days) were nearly snow white. He became worried about it and went to a doctor, who had known him all his life, for a consultation about his peculiar appearance. The doctor was a very frank individual, and told him that, from his own personal observation and knowledge, his hair was black and his whiskers white because he had worked his jaws harder then he had used his head.

There are some men, you know, who do much more talking than thinking. They seem incapable of listening to any one else. Usually in this class of individuals will be found those who discuss and emphasize their alibis for not delivering the goods.

We are not in this world for the purpose of manufacturing excuses for lack of results. The main questions is: "Are each and every one of us doing our level best?" If not, it's about time to take an inventory and find out what is lacking, either in ability, energy, qualifications, or consecration to the work that has fallen to our lot.

Of course it is not expected that every one shall be a star, but every one should try to excel in giving the best possible service. In that endeavor, no one can hope to succeed without heeding the voice of experi-

ence and advice and suggestions of those who have proved themselves to be worthy of confidence.

Hide Not Your Light Under a Bushel

The man who fails frequently makes this complaint: "The world is unfair. Its honors and riches too often go to him who imprudently pushes himself ahead, rather than to one of real ability."

In these very words, he has told the cause of his failure and suggested, at the same time, the only remedy.

For ability, unless it is haled forth, harnessed and put to work, must forever remain nothing more than a mere prob-ability.

Things which cannot be seen or felt by the people of the world have no reality—no existence.

The light hidden beneath a bushel casts no radiance and, in the eyes of the world, is darkness.

Gold is valueless until labor digs it up and puts it to useful purpose.

The diamond is worthless as long as it remains hidden in its native clay. Of what worth is a pearl lying on the ocean bed or inclosed within the oyster shell?

And so with merit; if inactive, it has no place in the world's work. Moral: Do a little pushing on your own account. Follow the example of he who imprudently pushes himself ahead if you would share in the world's honors and riches. For the world must know what you are and what you can do before it can avail itself of your ability. And the world is very apt to take you at your own rating.

The late Theodore Roosevelt once said: "I extend pity to no man because he has to work. If he is worth his salt, he will work when he has it to do. I envy the man who has work worth doing and does it well. There never has been devised and there never will be devised any law which will enable a man to succeed save by the exercise of those qualities which have always been the prerequisite of success; the qualities of hard work; of keen intelligence; of unflinching will."

How doubly fortunate is the man who has good health and a job at which he must work for a living. Aside from that I do not know of anything more important than to know:

What to do;
When to do it;
And how to do it.
And to keep at it!

SAFER and BETTER LIGHT FOR GRAIN ELEVATORS

Pioneered by

BENJAMIN

OW, for the first time, elevator operators are offered lighting equipment which satisfies all Underwriters' requirements for use in atmospheres containing hazardous grain dust and combines high lighting efficiency with positive protection against fires and explosions.

Benjamin has taken the leading role in the development of better and safer lighting for grain elevators. The new Benjamin Dust Tight "Inspection" portable fixture, described on this page, is a typical example of the way in which Benjamin engineers are helping the grain elevator operator to solve the dust hazard problem. In addition to the lighting equipment shown on this page, the Benjamin line includes Dust Tight Circuit Breaker Panelboards for lighting circuit control in grain elevators.

Because SAFER LIGHT is one of the cheapest forms of insurance against the dust hazard and because BETTER LIGHT is a primary efficiency factor in profitable operation, a thorough check up of your elevator's lighting can prove eminently worthwhile.

Elevator operators are invited to use the coupon for a copy of the Benjamin Explosion Proof Bulletin giving complete details on Dust Tight Lighting Equipment, as the first step in their investigation.



BENJAMIN TYPE 11-G DUST TIGHT FIXTURES
For every grain elevator lighting requirement. (Listed by Underwriters' Laboratories for Class II, Group G, Class III and Class IV Hazardous Locations).

BENJAMIN ELECTRIC MFG. COMPANY

GENERAL OFFICES AND FACTORY

DES PLAINES, ILLINOIS

NEW YORK

SAN FRANCISCO

CHICAGO



NEW! Portable Inspection Fixture

for Inspection, Cleaning and Servicing Operations in Grain Storage Bins and other locations requiring a portable unit

Listed by UNDERWRITERS' LABORATORIES

Highlights: DUST TIGHT construction with lamp entirely enclosed; STREAMLINED DESIGN, no pockets for dust accumulations; NON-FERROUS METAL GUARD, prevents sparking; HEAT PROOFED JACKET, LIGHT WEIGHT, SPADE TYPE HANDLE, for convenient grip. Designed to provide effective lighting on both bottom and sidewalls of bin through top manhole opening. Listed by Underwriters' Laboratories for Class II, Group G and Classes III and IV hazardous locations. Coupon brings complete details.

-	
ı	Benjamin Electric Mfg. Co., Dept. G., Des Plaines, Illinois.
-	Please send Explosion Proof Bulletin describing Dust Tight Lighting Equipment for Grain Elevators, which includes details on new Benjamin DUST TIGHT "INSPECTION" Portable.
ı	Name
L	Firm
L	Address
ı	City State

Efficiency of Elevator Legs



INCREASED ELEVATING CAPACITIES CAN BE ATTAINED BY SLOWING UP THE LEG

by HARRY L. HEINRIKSON

Superintendent, Terminal Grain Corporation, Sioux City, Iowa

THE earliest record we have of an elevator leg for handling grain is of a crude affair operated by a horse. It is probable that trouble with back legging of grain began at this time, as it was almost impossible to keep the horse going at an even rate of speed all of the time, although they always used a blind gelding for obvious reasons. When he did slow up, or went a little faster, it caused the aforesaid back legging.

Later on when this operation was done mechanically several different types of elevator buckets came into being, such as Salems, Empires, Buffalos and several others. The underlying principle of these buckets was centrifugal force, and the exact revolutions of the head pulley had to be figured out to a nicety so that the discharge would be constant and would clear the down leg.

A good deal of trouble was encountered here due to the fact that heavy loads might slow up the leg a fraction of a revolution or a light load might increase it the same amount. As the grain elevators became more important it was found they would have to take up greater capacities, and in order to get this capacity it was necessary to speed up the leg, and in order to accomplish the proper throw of the grain it was not unusual to see 96" diameter head pulleys in use. But still there was a great demand for increased capacities.

Head Blowing — Poor Discharge

The average bucket at this time was spaced about 13" centers and with most buckets today this still remains true, with the exception of the "V" bucket which can be placed in a continuous manner. It is well known that this bucket has very small capacity and when speeded up too much causes a poor discharge by blowing in the head. It was perhaps the

first bucket which could travel at different rates of speed and still discharge grain evenly though not entirely satisfactory.

Later on another elevator cup was put on the market. This cup had somewhat more variation in speeds and still was able to discharge, but in order to get a greater capacity the elevator legs had to run at a great speed and the spacing of the cups at the prevailing distance apart made these legs still unwieldy.

A few years ago another bucket was invented that is now in general use, which had large capacities and could be placed at practically a continuous position on the belt. This bucket halved the belt width necessary to take up a given capacity and did away with the necessity of the large pulleys, as it was found that these would discharge perfectly around almost any size of head pulley and discharge at virtually any speed from the lowest to the very highest, and would also pick up grain in the proper manner.

As to the relative merits of high versus low speeds there is a great deal to be taken into consideration. The average operator who likes a high speed finds that he can handle much more grain than formerly, but it is admitted that at unusually high speeds it is not only hard on the belt and machinery, but it is thought by some elevator operators to be somewhat of a fire and explosion hazard.

More Lagging Helps

Practically all elevator head pulleys are lagged. I believe it is just as important that the boot pulley and idler pulley should be lagged to prevent any sparking due to the bucket bolt heads striking the steel in either of the above named pulleys.

Since the large capacity, continuous bucket has been in use it has been found that some of these speeds can be cut down considerably. In one terminal

HAMMOND ELEVATOR BUCKETS







With Brace

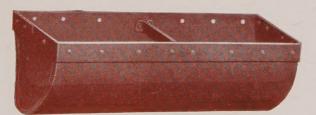
The HAMMOND ELEVATOR BUCKET needs no introduction as it has been extensively marketed and used under a trade-name during the last decade. The patent under which it was produced has now expired and we have equipped our elevator bucket department to manufacture a full and complete range of all sizes.

The HAMMOND ELEVATOR BUCKET is made to the exact dimensions that have proven so efficient in the past, but we have improved the specifications and construction. The result, as illustrated above, is a strong, rugged one piece bucket, perfectly smooth inside and out, with all bands that interfere with the pick up and discharge eliminated.

The gauge of steel used in fabricating standard-gauge HAMMOND ELEVATOR BUCKETS has been increased, but by eliminating the bands, the net weights of most sizes are less than those of the bucket constructed heretofore under patent, which insures increased strength and wearing qualities with less weight and wear on the belt.

Write for Samples and the Name of Your Nearest Dealer.

We have the most modern and complete machinery and equipment for the production of elevator buckets in the industry and manufacture practically every type and size in general use today, a few of which are illustrated below.



Buffalo Elevator Bucket



Rialto Elevator Bucket



Steel Grain Bucket



Minneapolis "Y" Bucket



Steel Ear Corn Bucket with Brace

SCREW CONVEYOR CORPORATION

GENERAL OFFICE & PLANT

700-706 Hoffman St.

HAMMOND, INDIANA

house speeds were cut from 850 feet per minute to 520 feet per minute with an increase of about 2,000 bushels' capacity over the high speed capacity and other buckets. It is not my intention to suggest that high speeds be cut down, but I do believe that—all things taken into consideration—it is not economical nor safe to speed up a belt to over 850 feet per minute, although I can cite several cases where belts have been working satisfactorily as high as 1,068 feet per minute.

Beware of Damaging Barley!

Another thing to be taken into consideration is whether or not certain grains will be injured by running at a high speed. For instance, I have found that dry malt should not run at a speed to exceed 460 feet per minute—as the maltsters are very particular that the outside of the berry is not damaged in any way. This necessitates a rather slow speed. Barley can be handled at a high speed but the same thing takes place as with the malt and therefore it should be run at a moderate speed.

In the average grain elevator, aside from barley, the injury to the grain from high speeds probably amounts to very little. It might be worth while to mention one instance where soybeans were being handled at almost 1,100 feet per minute, the buckets doing a good job of picking up and delivering the beans. There was, of course, some injury done to the bean. The manufacturer of the buckets happened to see this and suggested that this leg was going pretty fast and might be harming the beans. But the Superintendent of the elevator said this was perfectly all right as the beans were going to be ground up anyway and this would save some of the wear and tear on the machinery further on.

Greater Capacities Possible

Regarding the high speeds of marine legs: This is really one place where speed is demanded in order to unload the boats; 850 to 860 feet a minute seems now to be about the proper speed, although I would like to make a suggestion at this time, after having seen a great many marine legs work, that the operator would get better results from dipping the leg into the grain just deep enough to give the bucket a chance to get hold of the grain, instead of the present dropping of the leg to the bottom of the hold. This, of course, saves the operator some work in moving the leg around and depending on the grain sliding down the boot, but the pull on the motor and the strain in the belt and buckets in this case is terrific.

I believe if as much attention were paid to the design of elevator legs and spouting throughout an elevator (which I hold to be one of the vital points in

DOWSE TOPS U. S. GRAIN COMMITTEE

Placidly dynamic, silently surging, forcibly drawn constantly forward towards bigger goals, is Orrin S. Dowse, vice president of the Stratton Grain Company and a director of the Chicago Board of Trade, new head of the Grain Committee on National Affairs for the coming year.

Youngest chief executive of this active body, blessed with an over-abundance of level-headedness and good "hoss" sense, he promises to continue the sweeping momentum already achieved and may change rations to win in the home stretch.



elevator construction) as is spent on the engineering of the rest of the elevator, it would result in a vast improvement over the average run of elevators. In fact, in a great many cases, when the house is designed, these are the last things taken into consideration, and when it comes time to make the plans of the spouting the penalty has to fit the crime.

A great deal has been said regarding back legging and everybody seems to have his own ideas regarding this. One of the bad features which no one seems to pay much attention to is the blowing of the grain in the boot, and when the buckets emerge from the boot, especially at a high speed there is a certain amount of grain that falls off the bucket and also a certain amount of light, fluffy material. In some cases this light material is carried all of the way to the top, which helps accentuate the blow in the head. One manufacturer has designed on the front of the up leg just above the boot and extending up to the first joint, say about ten feet, a compartment which projects out about four or five inches with baffles toward the buckets. As the buckets go by, the light grain and fluffy material go through these baffles and not being able to get back in again drop down into the boot. This keeps the material from following up and causing trouble in the head.

I believe a great deal of trouble can be eliminated if the Superintendents will make a critical study of the condition of the legs in their houses. I believe it would be time well spent, as they no doubt will find many places where much needed improvements can be made. This is merely a suggestion, but I have found, from personal experience, that it works out well.



Succe WATERIAND CORESTO Must

EACH JOH

INDIVIDUAL

CALL IN TO SPECIALIST PROBLEMS

CHEERFU

ESTI

The M. W. KELLC

Representative C. L. HANSEN
53 WEST JACKSON BLVD.
CHICAGO, ILLINOIS

ESTABLIS

Refe

OFING

CRETE

TION

DONE

RTS!

OUIRES

IAGNOSIS

EATMENT

LEADING

N YOUR

DAY! WE

GIVE

ES



COMPANY GG

BROADWAY NEW YORK CITY

NN & BRADSTREETS

Supérulendents



C. J. ALGER

facturing Department of Corn Products Refining Co., an active director in the Society of Grain Elevator Superintendents, is a well known figure in terminal elevator circles through his untiring efforts in behalf of the Association. The amount of time and energy he has expended for the welfare of the organization is startling in view of the manifold obligations he shoulders on his own job.

C. J. — or "Chet" as he is popularly called, began his business career in 1904 at the age of 15 years for the old Glucose Sugar Refining Co., in Chicago. In 1907 this company consolidated with Corn Products Refining Co., and the 18 year old kid was placed in charge of paying all invoices in the construction of the mammoth plant in Argo, Ill. He filled the bill so efficiently that when the plant was completed, he moved in as head of the Mechanical Stores Department

All this time "Chet" had been burning plenty of midnight oil in an intensive drive to improve himself, and the upward steps he continued making proved that the oil wasn't wasted. 1912 rolled along and with it an opening in the Mechanical Department at the Chicago offices which was promptly grabbed by young Alger. He was given the task of installing and operating a construction cost system covering the erection of the Pekin, Ill. plant. He must have done a fine job for the next year he was appointed assistant to the department manager and a short three years later he was promoted to the manager's post.

The manufacturing department under the C. J. Alger regime has reduced the frequency and severity of accidents in the plants 90% by a thorough and all-embracing safety campaign. "Chet" also is serving as representative of the starch industry on the Dust Explosion Hazards Committee of the National Fire Protection Association.

His duties are many and varied—running from real estate (he supervised the building and sale of the 200 homes adjacent to the Argo plant) to the responsibility for all first aid rooms, and on through maintaining cost systems for the globe-encircling plants. He handles all insurance compensation and in his spare time edits the firm's magazine, "The International News." All this is outside of his position as Secretary of the Manufacturing Committee of Corn Products Refining Co., Director and Vice President of the Argo State Bank and Director of the Autoist Mutual Insurance Co. of Chicago.

And still he finds time for the Society of Grain Elevator Superintendents!

W. FEEMSTER, Superintendent of Elevators for the Western Maryland Railway Company and an active member, director, and officer in the Elevator Superintendents' Association, is an "old timer" of the great plains in the days of the covered wagon and the isolated homestead. At the age of two he journeyed from Greenville, Tenn., to the far corner of Kansas in a "prairie schooner" and, during his youth, saw the Old Wild



H. W. FEEMSTER

West undergo the transformation from unruly cattle country to the peaceful land of golden grain.

At the age of 19 he drifted into Kansas City and there began a long and illustrious career in the grain business. The C. & G. W. Ry. was just breaking ground for the old Maple Leaf Elevator and young Feemster, appropriately enough, began his life's work shoveling — but instead of grain it was good old Kansas "gumbo" clay. He stuck with it and, as the work progressed, rose with the cribbing—working with every gang on the job until the plant was completed.

Curiously, now that he had knowledge of the externals, Bill wanted to see how they worked and so the next 4 years found him shoveling grain, spouting and weighing.

For a year then he served as check-weigher for the Kansas City Board of Trade and stepped from that into the Superintendency of the "Q" Ry. transfer house operated by the old Armour Grain Co. Three years passed and the transfer house was shut down, so H. W. took the foreman's position in the new Murray Elevator in North Kansas City and in 1913 was appointed Superintendent of the Acme Elevator.

In 1914, the ex-pioneer journeyed to Galveston, Texas, where the Galveston Wharf Co. promptly offered him the Night Superintendency of their plant. A year passed and the old desire to ramble rose up again and once more H. W. was on the move. This time he wound up in Baltimore, Md., and evidently "staked a permanent claim" for that was twenty-one years ago.

The Western Maryland Railroad offered him the general foreman's berth in the new elevator they were building and H. W. held that position until the demise of Superintendent Jack Peterson. The mantle of Superintendent naturally fell upon H. W. Feemster's broad shoulders and for the past five years he has cooly and efficiently supervised the W. M. R. R.'s up-town office and elevators.

SCHMITZ SEZ:

There's a tale emanating from the genial chief of Chicago's Weighing Department, Joe Schmitz, concerning the Superintendent

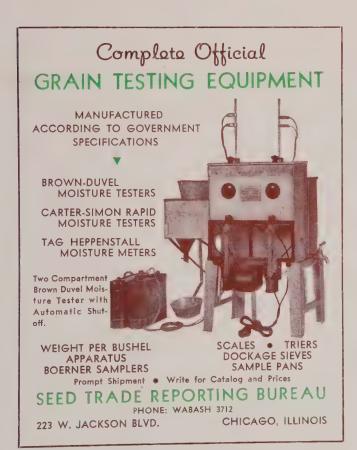


who burst out in a roar of anger upon receipt of a \$200.00 repair bill.

The super summoned the man who had performed the job and demanded: "What's the idea of this \$200.00 charge! Why, you only tapped a certain piece of the machinery with your hammer and it was in good working order again!"

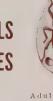
"Well," said the mechanic, "I only charged you 50c for the actual striking of the hammer BUT I added \$199.50 for KNOWING WHERE to strike!"

Good Inspection Tip Armed with big placards reading "Cleaning Up Needed Here!" - Inspection Committee, a new group of three workmen are appointed each month to make the elevator a cleaner place in which to work. It is then up to the ones in charge to see that the cleaning up is done and the sign returned. Psychologically and in practice the workmen take a much greater interest in keeping the plant cleaner, partially, perhaps, because a list of the dirty places is posted and also checked by the committee when the signs are turned in.





SAW TOOTH BEETLES **CADELLES**





Adult rice weevil feeding on kernel weevil feeding on

and all other insects that destroy stored grains.

A new gaseous fumigant now protects stored grain from insect infestation. It is called Proxate and when properly applied, it destroys all insect life in grain stored in concrete, tile. brick or steel bins. Prox-



kernel



grain beetle

Adult Cadelle

ate kills insects in all stages — eggs, pupae, larvae, adults.

Proxate is safe . . . non-explosive and non-inflammable. Non-dangerous to humans. Costly shut-downs are avoided. Germinating powers of raw grains are in no way affected. Leaves no odor or residue. Easily applied.

For detailed information about Proxate, send for free booklet.

THE LIQUID CARBONIC CORPORATION

3110 South Kedzie Ave. - Chicago, Ill.

Branches in 37 Principal Cities of the United States and Canada

- X	London. England	
	Havana, Cuba	
\ <i>V</i>	SEND FOR DOON TE	
TOOXALL	FREE	
Elmisation	BOOKLET	
- 100		
and the second	LIQUID CARBONIC CORPORATION	
3110 South Kedzie Ave Chicago		
	py of "Proxate Fumigation Hand Book"	
My name		
Company		
Address		
City	State	

Superintendents' Convention Sparkles with Accomplishments

Association Reaches "New Peaks" . . . "Management" Takes Active Part . . . Delegates Turn Out From As Far As Buenos Aires, Argentina.

Fifty-Foot Box Cars Labelled "Curse" Of Terminal Elevator Operation... Waterproofing, Car-Door Opening, And Automatic Sampling Examples Intrigue Attendance... More-Lasting Spouting To Be Developed... Inspect Radio-Equipped Spencer-Kellogg Plant.

Duluth Board Of Trade Entertains With Inspection Trip Via Boat . . . Business Sessions "Click" With Firing-Pin Precision . . . Great Praise Heaped On Duluth And Minneapolis Committees For Finest Program On Record.

Henry Cox Succeed's Oscar Olsen To Throne . . . Champlin And Orstad Elevated To Vice Presidencies . . . "Fighting" Directorate Of Nine Counted On To Do Big Things . . . Expect New Chapters To Be Established In Fort William And Few Other High Spots.

Duluth Dust Goes "Flat" In Explosion Test . . . Car Unloading Solution A Little Closer . . . Valuable Invention Presented . . . James Richardson & Sons, Ltd., Winnipeg, Compliment Convention With Two Kiltie-Clad Scottish Pipers.

PARKLING indeed was the outstanding Seventh Annual Convention of the Society of Grain Elevator Superintendents, and well reimbursed are its members who were so fortunate as to be present. For years to come this impressive conference will oft be fondly referred to after "Do you remember in '36 when . . . Wasn't that great?"

Gratified and honored, and rightly so, are the Duluth and

Gratified and honored, and rightly so, are the Duluth and Minneapolis members who engineered one of the finest, fullest, fastest-moving technical conclaves yet called to order. Equally praised are the many terminal elevator executives for their fruitful endeavors in wroughting the increased representation present — as are the membership indebted to them for their indispensable assistance.

Special homage therefor was unanimously voted to Walter McCarthy, President of the Capitol Elevator Co., and to Cccil C. Blair, General Manager of the Peavey and Globe interests, both gentlemen of Duluth; and to Otto F. Bast, Vice President and General Manager of the Union Elevator Co., and First Vice President of the Grain & Feed Dealers National Association, and to J. A. Mull, General Manager of the Central Elevator Co.,

Peavey unit, of Minneapolis, all four being elected to Honorary Memberships in acknowledgment and appreciation of their accom-

plishments for the Society. But four other gentlemen have been voted such recognition since the inception of this advancing group, so what has of late been done for this association obviously meant considerable.

Notable, too, was the high caliber of the delegates attending, everyone staying right in their own "box" and "pitching" for all they were worth. And can any association equal the record of holding various committee meetings until three-thirty (A. M.) perfectly dry? Even the delegate from Argentina must have been surprised at that.

Laden with saturated business sessions and round-table discussions, the convention moved en masse under the particularly capable guidance of Retiring President, Oscar W. Olsen of Duluth, First and Second Vice Presidents James Mackenzie of Toronto and Vic Champlin of Minneapolis. Full to the brim, ofttimes spilling over, were the days and evenings, all packed with meetings and inspection trips. In "Ready!" "Aim!" "Fire!" staccato the program "clicked,"—the "bull's-eye" was struck in repeating rotation, with but four disappointments out of the forty addresses scheduled. Tense with interest were the convention-hall delegates from early morn 'till late at night.

Fifty-foot box cars were branded the "curse" of terminal ele-

vator operation, and action started to eliminate this practice—with the co-operation of the Grain Exchanges concerned. An-



President-Elect HENRY S. COX Star Grain Co. of General Mills, Chicago, Ill



First Vice Pres.
VICTOR CHAMPLIN
Archer-DanielsMidland Company,
Minneapolis, Minn.



Director
JAMES MACKENZIE
Toronto Elevators,
Toronto, Ont.



Director HENRY KEIR Bartlett-Frazier,



Director
GODFREY MORGAN
Spencer-Kellogg
& Sons,
Buifalo, N. Y.



Director
JAMES G. SHAW
C. P. R. Elevator
Port McNicoll, Ont.



Director
HAROLD WILBER
A. E. Staley Mig. Co.,
Decatur, Ill.



Director
ED J. RAETHER
Union Elevator Co.,
Minneapolis, Minn.



JAMES G. HAYHOE Re-Elected Technical Secretary



Honorary Director Past President ELMER H. KARP Farmer's National Chicago, Ill.



Honorary Director Retiring President OSCAR W. OLSEN Peavey Elevator, Duluth, Minn.



Honorary Director
Past President
WM. H. GASSLER
Rosenbaum Brothers,
Chicago, Ill.

other development growing out of this conference was the possibility of developing more lasting spouting, further adaptation of amplifying radio systems to elevator operation—such as was seen at the Spencer-Kellogg plant, and further promised studies into atmospheric conditions essential for a dust explosion. Duluth dust did not have the same "kick" in the model elevator-explosion chamber here that dust taken from the same spot had the previous year when blasted in Chicago's atmosphere, leading to the belief that further trials might develop new data in this connection.

Among the other high lights of this important conference were the inspection trip via boat given the Society by the Head-of-the-Lakes Terminal Elevator Operators Association; the kiltie-clad pipers sent from Fort William by James Richardson & Sons, Ltd., of Winnipeg, and all the innovations viewed and ideas presented in both progressive cities. Waterproofing, car-door opening, automatic sampling, and dozens of other educational inspections were afforded, which many were heard to say were alone worth the time and expense in coming to the convention—not to mention the unexcelled program.

So important have these meetings become in the eyes of the members that 'tis said many have not dared to accept office with the increasing work and responsibility—particularly after the splendid precedent set up by President Olsen and his capable cohorts in arranging even the minutest details to perfection this year. With the mammouth stride taken forward this past Spring by the Society even the responsibility of becoming one of the nine Executive Directors was a matter of discussion with the Nominations Committee for three days.

New chapters will, it is reported, be established in Fort William and Port Arthur, and a few other high spots, as the result of the glowing reports filtering through the grain handling industry. All believe this move, following the lead of the progressive Association of Operative Millers with nine chapters, will give greater opportunity for the discussion en masse of various problems coming up between the annual convention dates. Clearing the decks for further fast and furious action, the convention also ordered all "past due" members to forfeit their places to new applicants to delay the day when the 250 mark brings about

REDILER

CONVEYORS - ELEVATORS

CLEAN... DUSTLESS | EXPLOSION PROOF

Lower Insurance

Handles wheat, corn and other grains — conveying horizontally, vertically, up inclines or around curves, in the same conveyor unit . . . The load flows in a solid, undisturbed column through an enclosed steel casing . . . Endorsed by Fire Prevention Engineers because there is no dust to create fire hazard. Drawing shows an elevator, in which three REDLERS unload, turn or load out 15,000 bushels per hour, without danger of fire or explosion.

Write for Catalog No. 42 describing Redler Conveyors.

STEPHENS-ADAMSON MFG. CO.

Belt Conveyors

Bucket Elevators

Screw Conveyors

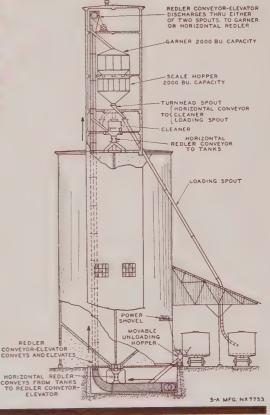
Takeups

Buckets

Belt Conveyor Carriers

72 RIDGEWAY AVE.

AURORA, ILLINOIS



THESE OUTSTANDING PRO-CESSORS, GRAIN FIRMS, MALSTERS AND CONTRACT-ORS FIND IT ADVANTAGE-

CALUMET BUCKETS

Why Don't You Try Them?

These are only a few of the hundreds of representative installations of

CALUMETS

Standard Brands Spencer Kellogg & Sons Norris Grain Co. General Foods Allied Mills G. L. F. Central Soya Co.

Ouaker Oats Cargill Grain Co. Hales & Hunter Farmers National Rosenbaum Brothers

Fleischmann Malting Co. Northwestern Grain & Malting Co. Froedtert Grain & Malting Co. American Malting Co.

James Stewart Corp. John S. Metcalf Co. MacDonald Eng. Co. Burrell Eng. & Const. Co. Indiana Eng. & Const. Co.

GREATER CAPACITY RUNS SATISFACTORILY AT ANY SPEED NO BACK-LEGGING

B. I. WELLER

Sole Manufacturer

704 HOFFMAN ST. HAMMOND, INDIANA 327 SO. LA SALLE ST. CHICAGO, ILL.

In Minneapolis Order from W. S. Nott & Co.



JACK COUGHLIN Union Elevator., Co., Minneapolis, Minn. An Active Receptionist



HOLLIS GRAVES Capitol Elevator Co. Helped Make Wheels Go 'Round in Duluth

the closing of the rolls. (Nearly four-score new members were approved at this meet.)

Activities during the coming year will hereafter be publicized to the membership, the new directors have decided, to maintain this present "peak" interest throughout the coming year. And while no convention city has been selected for 1937 it is planned

while no convention city has been selected for 1937 it is planned to start the wheels into action before long. Toronto, Kansas City and Chicago are being considered for the Eighth Annual. Henry S. Cox, veteran Superintendent of Star Grain Co.'s "Rialto Elevator" in Chicago, (a General Mills unit) succeeds Oscar Olsen to the throne, fortified by the elevation of V. I. Champlin, General Superintendent for Archer-Daniels-Midland Co. Mingeopolis to the first vites precidency, and S. S. Orstand Co., Minneapolis, to the first vice presidency; and S. S. Orstad, Local Manager for Federal Grain Limited and Northland Elevator Co. Limited, both of Fort William, Ontario, to the second vice presidency. James G. Hayhoe was re-elected Technical Secretary and a Director.

Hereafter but three Directors will be chosen each year to

Hereafter but three Directors will be chosen each year to serve three years, consequently the following nine hard-working directors elected this time will serve for terms of different lengths, their periods in office being governed only by their geographical locations this time. These are:

James Mackenzie, Toronto (Ont.) Elevators, Ltd.; Henry Keir, Bartlett Frazier Co., Chicago, and H. L. Heinrikson, Terminal Grain Corp., Sioux City, Ia., all for three years; G. J. Shaw, C. P. R. Elevator, Pt. McNicoll, Ont.; Wm. F. Schaediger, Corn Products Refining Co., Edgewater, N. J., and Harold Wilber, A. E. Staley Mfg. Co., Decatur, Ill., all for two years; and Godfrey Morgan, Spencer Kellogg & Sons, Buffalo; E. J. Raether, Union Elevator Co., Minneapolis, and M. Frank Beyer, Grand Trunk Pacific Elevator, Fort William, Ont., for one year. Past Presidents Elmer Karp, Farmers National Grain Corp.,

Past Presidents Elmer Karp, Farmers National Grain Corp., Chicago,; Frank L. Neilson, Cargill Warehouse Corp., Minneapolis; Wm. H. Gassler, Rosenbaum Brothers, Chicago, and Oscar Olsen, Peavey Duluth Terminal Elevator, Duluth, were

made perpetual directors.

It was a marvelous opportunity and a glorious affair, and everyone felt well repaid for the operative and mechanical data made available. The next conference can't come too soon for most, and present interest assures another top-notch year for the S. O. G. E. S. O. N. A.



F. MAYNARD LOSIE Twin City Trading Co., Minneapolis, Minn. Busy Committeeman



JACK MACINNIS. Russell-Miller Mig. Co.
Duluth, Minn.
Another Hospitable
Host

Dear Dean:

Life would be pretty sour if we didn't learn something new every day, wouldn't it? Of course, I've heard the old saw, "There's nothing new under the sun," but I take issue with that gem of wisdom. The philosopher who spouted that one off evidently forgot that what is old to one isn't necessarily old to another; that in spite of all the accumulated knowledge of man, there's a powerful-large bunch of us who still keep pepped up by daily discovering something which is at least new to us.

Nothing new under the sun? Pfui! I'll bet the wise-acre who said that, thought HE was saying something new!

Here's something new I've learned since I've been parking my blue pencil on your editorial desk: that the men who write GRAIN'S stories and the men who write GRAIN'S Ads are brothers under the skin. They both have the interest of the grain industry at heart.

There is just as much thought and effort put into the writing of an Ad as there is in the compilation of a story. And the knowledge derived from the intelligent reading of an Ad is just as great as that derived from absorbing a good story.

Behind the actual writing is, in the case of the author of a grain story, years of intimate contact with the business, and, in the case of the Ad writer, the resources and intense research of vast factories backing him up.

So now, Dean, since I've stumbled over this new angle, I find myself reading with a great deal more interest the pages of a magazine from cover to cover—and increasing my sum total of enjoyment in life.

Yours truly,

Sandy

Warns Against Defective Water Sprinklers

NEW YORK, N. Y.—A warning against using second-hand sprinkling equipment is being broadcast by the National Automatic Sprinkler Association. "The belief that 'used' sprinkling systems are economical is unwarranted," they caution, "inasmuch as care is rarely used in dismantling its sensitive mechanism."

Approval of underwriters is likewise usually withheld where second-hand systems are installed, which makes investment therein highly unprofitable.

A news-item reporting water damage in a terminal elevator from a defective sprinkling system which blew out and flooded a section of the storage unit emphasizes the import of this warning.

PROTECTION

or

EXPLOSION?

Try the Robertson Method of protection against the hazards of dust explosions

Robertson Safety Ventilators

Protect elevator legs from Dust Explosions, because:

They remove the more explosive fine dust from the leg by continuous gravity action.

They release pent-up gases and flames, in case of an explosion.

They minimize the possibility of a secondary explosion by continuously venting gases and dust.

Terminal elevators throughout the country are using Robertson Safety Ventilators.

Robertson Capacity Bin Ventilators

For balanced ventilation of grain storage bins.

Robertson Capacity Bin Ventilators are guaranteed not to give more than .0026 water gauge resistance and not less than 324% free area outlet vs. stack area.

Robertson Protected Metal

This corrugated steel roofing and siding material is protected from corrosion by asphaltic and asbestos coatings. Ideal for terminal buildings.

Write for information—no obligation.

H. H. ROBERTSON CO.
2000 GRANT BUILDING
PITTSBURGH, PA.

The HARVEST ISREAPED NETTUSETS GRAIN

Corn Explodes into the Headlines

HE startling new discovery by a pair of Iowa chemists in uncovering a dynamic outlet for a portion of the corn yield has been of sufficient general interest to merit newspapers the country over giving it wide spread publicity. And why? Because it's dy-



It is difficult to bridge the gap between placid corn and rending dynamite but these two men did — and how! They have proved that the farmer planting his kernels of seed corn is actually a potential "mine-

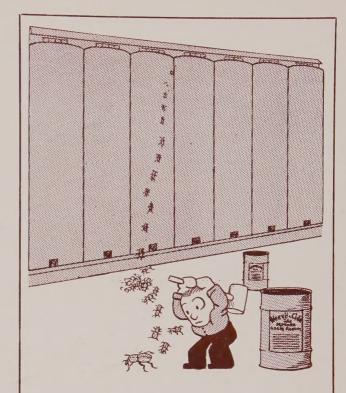
layer" of war times placing a network of explosives across a given area. But don't evacuate the rural districts just yet, for those planted seeds must go through an involved process before they become bombs.

Introducing Kid Inositol

Professor Edward Bartow, chief of the University of Iowa department of chemistry reports his associate, Dr. W. W. Walker, has cannily devised a cheap extraction process to remove the sugar-like substance known as inositol from corn. Inositol has long been known of but the former extraction process—\$500.00 per pound-kept it in the luxury class. This substance has many possible uses, chief of which is its superexplosive quality. By itself, being a form of alcohol, it is nonexplosive but the simple process of nitration makes it in comparison to dynamite a bursting bomb in the company of spluttering matches. It even makes nitroglycerin, the safe-blower's pet, a mere weak sister because it is a solid and has twice the nitrate content of nitroglycerin.

In the manufacture of dynamite, nitroglycerin is mixed with infusorial earth to change it from liquid to solid. The infusorial earth is naturally inert. This is where inositol gets the jump on dynamite for the chemists do not expect any inert addition necessary for this newest and wildest offspring of Father Corn.

This versatile newcomer rings the bell in another field. Although no conclusions have been announced,



Positive RESULTS



INSECTICIDES MANUFACTURED

Especially FOR THE GRAIN TRADE

WEEVIL-CIDE COMPANY

1406 W. 9th ST., KANSAS CITY, MO.

GREAT LAKES SUPPLY CORPORATION

Distributors of

MAINTENANCE SUPPLIES

Of Every Description

for the

GRAIN ELEVATOR TRADE

COMPLETE STOCK OF

UPSON

ELEVATOR BOLTS

9342 Ewing Avenue CHICAGO

TELEPHONE: SOUTH CHICAGO 7600

A copy of our General Catalog "B" for the asking

the hard working worthies in Iowa are turning to its possibilities in the realm of medicine. It is thought inositol may become an aid in the treatment of diabetics.

Rises from Waste

There will never be a shortage of supply for the production of inositol. Professor Bartow explains the new extraction process makes it from the "steep" liquor waste from the manufacture of corn starch. This waste in the United States alone would supply a million pounds of inositol a year.

This latest test-tube miracle of linking the peaceful farm with the roar of bursting bombs is astounding; but astonishment is welcome when it shows the grain industry advancing.

Digs Up Good Old Days

REMEMBER 'WAY BACK WHEN:

Elevators had one horse power -- Ol' Dobbin?

There were no loading spouts—handshovels doing the job?

30 cap cars were standard and when the 80 cap boxes finally came along they were called "Elevators On Wheels?"

Patent grain doors were attached to each car?

The Inspector's hands took the place of grading equipment—test scales, moisture machines, kickers, sieves, et al?

The first one-lung gas engine power plant came along, causing much shaking of cautious heads?

The rope drive first appeared and retired sailors were in demand for splicing ropes?

We carried lanterns all over the place and explosions were unheard of?

It took an hour to load a car and several days to finish a boat?

Weevil were "unknown?"

Grain was shipped "AS IS?"

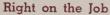
The cooling Can was rushed at nine, twelve and three?

The eight hour day arrived?

The dust gathered in piles until the Saturday p.m. clean-up?

We sat on the front stoop and gassed about "the good old days?"

Out of the Blower .



"Are you a clock watcher?" asked the employer of the candidate for a job.

"No. I don't like inside work," replied the applicant, "I'm a whistle listener."

"Anybody can cut prices, but it takes brains to make a better article."—Philip D. Armour.

Look Again

Clothier: That coat fits you like a glove. Customer: Feels more like a mitten to me!

"Cooperation is not a sentiment—it is an economic necessity."—Chas. Steinmetz.

Not a Prospect

Business Man: Well, if it isn't John Corcoran, the man I met up in Maine one rainy night six years ago at the Moose River Junction railway station.

Salesman (retreating to door): Good day, sir.

Business Man: Aren't you going to try and sell me something?

Salesman: No. I sell memory courses.

Take advantage of the little opportunities and you won't need to wait for a big one.

The Real Reason

Lawyer: So you want a divorce? Aren't your relations pleasant?

Client: Mine are pleasant enough but hers are terrible.

Getting Old

Dad: So you failed in your history test because you couldn't name all the presidents? When I was your age I could name them off in the right order without stopping.

Son: Aw, yes, but there was only about 10 or 11 then.

Smart Strategy

The one thing to remember about fighting is to fight with intelligence. But sometimes you can't find a smaller man.

No Secret

Screen Actress: I have a certificate from my doctor saying that I cannot act.

Manager: Why go to all that trouble? I could have given you such a certificate without cost.

"If you want work well done select a busy man—the other kind has no time."—Elbert Hubbard.

Is That So?

"I'm surprised at you! Do you know what they do with boys who tell lies?"

"Yes, sir. When they get old enough the firm sends them out as salesmen."

"Time is the touchstone that proves the character of men."—Menander.

Hard to Manage?

She: I never could see why they always call a boat "she."

He: Have you ever tried to steer one?

Try It

Youth (to fair companion): Have you ever tried listening to a play with your eyes shut?

Voice (from row behind): Have you tried listening to one with your mouth shut?

Whose Quitting?

Judge: "Now, I don't expect to see you here again, Rastus."

Rastus: "Not see me agin, jedge? Why, you-all ain't goin' to resign, is you, jedge?"

So Long

The Young Man: "Say, Pop, how soon will I be old enough to do just as I please?"

The Old Man: "I don't know, Son; nobody has ever lived that long yet."

Filling the Library

"My papa's a bookkeeper," said little Albert proudly.

"Yes, I know he is," replied little Dorothy. "He borrowed one from my papa."

Some Logic!

Chaplain: "How could you have the heart to swindle people who trusted in you?"

Prisoner: "But, parson, people who don't trust you cannot be swindled."

"No man is free who cannot command himself."—Pythogoras.

Quick Results

Tom: "Did you give your wife that little lecture on economy you talked about?"

Dick: "Yes"

Tom: "Any results?"

Dick: "Yes, I've got to give up smoking."—Colonial News.

"Get your happiness out of your work or you will never know what happiness is."—Elbert Hubbard.

Trial Order

"Darling, do you think you can manage to live on \$25 a week?"

"Precious, get the license. I'll try it a week."

New Business

"Is this the Fidelity Insurance Com-

"I want to arrange to have my husband's fidelity insured."

New Version

"Dad, tell me, what does 'bankruptcy' mean?"

"Bankruptcy, my boy, is when you put your money in your hip pocket and let your creditors take your coat."

Real Estate Item

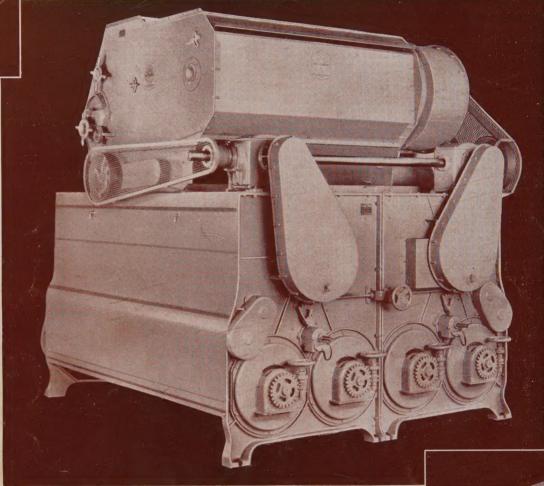
"What's this big item on your expense-account?"

"Oh, that's my hotel bill."

"Well, don't buy any more hotels."

DISCS and CYLINDERS combined for BIG TERMINAL CAPACITY

Carter Discs insure exactness and fineness of separation at high speed.



More Bushels-Cleaned Better per unit of space, power, cost!

 By combining both disc separation and cylinder separation, together with scalping and aspiration, into one compact, heavy-duty machine, the Hart-Carter Company makes available to Terminal Elevators one of the greatest, high-capacity grain cleaning mechanisms ever produced. Occupying a minimum of floor space, remarkably low in its head-room requirement, unusually economical in its power consumption, the Carter Disc-Cylinder Separator #2564 sets new standards for accuracy, flexibility and capacity. In one operation it makes five major separations, in addition to scalpings and air screenings - cleaning more bushels of grain more thoroughly per dollar of investment than has heretofore been possible with any standard Terminal equipment. Whatever you do, get the facts about the Carter Disc-Cylinder Separator!

HART-CARTER COMPANY

CARTER-MAYHEW DIVISION

706 Nineteenth Ave., N.E.

Minneapolis, Minnesota

 Hart Uni-flow Cylinders provide flexibility and versatility in the cleaning operation.

Check list of Extra Values

- √ Capacity
- Flexibility
- **✓** Accuracy
- **✓** Compactness
- ✓ Low cost
- ✓ Low power
- **▼** Simplicity ✓ Long life